

Response Under 37 C.F.R. 1.116

Applicant: Thane M. Larson et al.

Serial No.: 09/924,163

Filed: August 7, 2001

Docket No.: 10012383-1

Title: DEDICATED SERVER MANAGEMENT CARD WITH HOT SWAP FUNCTIONALITY**REMARKS**

This is responsive to the Final Office Action mailed October 25, 2005. In that Office Action, the Examiner rejected claims 1-20 under 35 U.S.C. §102(e) as being anticipated by Wong, U.S. Patent No. 6,528,904 ("Wong"). Claims 5, 11, and 17 were rejected under 35 U.S.C. §103(a) as being unpatentable over Wong in view of Bassman et al., U.S. Patent No. 6,295,567 ("Bassman").

With this Response, Applicant respectfully traverses the Examiner's rejection of claims 1-20. Claims 1-20 remain pending in the application and are presented for reconsideration and allowance.

35 U.S.C. §102 Rejections

The Examiner rejected claims 1-20 under 35 U.S.C. §102(e) as being anticipated by Wong, U.S. Patent No. 6,528,904 ("Wong"). Actually, the inclusion of claims 5, 11, and 17 in the 102(e) rejection appears to be a typographical error, since the Examiner never addressed these claims in the 102(e) rejection. Thus, Applicant's remarks with respect to the 102(e) rejection are directed to claims 1-4, 6-10, and 12-16, and 18-20.

Independent claim 1 recites "wherein the management card includes a LAN switch configured to be coupled to the plurality of host processor cards and an external management network."

Independent claim 8 recites "the dedicated management card coupled to the plurality of host processor cards via a LAN switch on the management card" and "communicating with an external management network via the LAN switch."

Independent claim 14 is directed to a management-dedicated server management card, and recites "a multiple-port LAN switch having at least four ports, the LAN switch coupled to the controller and configured to be coupled to a management connection of at least one of the plurality of removable cards."

First, it should be pointed out that the Examiner did not appear to even address the limitation a multiple-port LAN switch "having at least four ports" in claim 14. This limitation was added in the Amendment filed on August 3, 2005. The cited references do not teach or suggest a server management card with a multiple-port LAN switch having at least

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four ports, as recited in independent claim 14. Applicant respectfully requests reconsideration of the finality of the current office action, and requests reconsideration and allowance of independent claim 14, and the claims depending therefrom.

With respect to the independent claims, the Examiner stated that:

As for claims 1, 8, and 14, Wong teaches a server system . . . wherein the management card includes a LAN switch configured to be coupled to the plurality of host processor cards and an external management network (see figure 1, SERVER MGNT BLADE 10, 12 and column 5 lines 18-32 and column 2 lines 43, wherein the server management includes a mux 22 to control the switch blade 14 for providing network switching of packets and routing for various protocol layers, thus column 5 lines 18-32 teaches a mux in the SERVER MGNT BLADE 10, 12 to control SMBUS/LAN as shown in figure 1). (Final Office Action at para. no. 2, pages 2-3).

Thus, the Examiner appeared to argue above that the MUX 22 disclosed in Wong corresponds to the LAN switch recited in the claims. MUX 22 is a multiplexer, not a LAN switch. A multiplexer is configured differently, and operates in a different manner than a LAN switch. There is also no teaching or suggestion in Wong that the MUX 22 could or should be replaced by a LAN switch.

Wong also discloses switch blades 14, which "provide network switching of packets and routing for various protocol layers (Wong at col. 2, lines 36-38). However, switch blades 14 are separate and distinct from the server management blades 10 and 12. There is no teaching or suggestion in Wong that the switch blades 10 and 12 could or should be incorporated into the server management blades 10 and 12.

The Examiner also appeared to argue in the above block quote that the SMBUS/LAN 25 is an external management network as recited in the claims. Applicant respectfully disagrees. The elements shown in Figure 1, including the SMBUS/LAN 25, are part of a single server with hot swappable blades. (See, e.g., Wong at col. 2, lines 18-22). The SMBUS/LAN 25 is an internal bus of the server, not an external management network. Wong does not teach or suggest that multiplexer 22 could or should be coupled to an external management network.

Wong does not teach or suggest a management card that includes a LAN switch configured to be coupled to a plurality of host processor cards and an external management network, as recited in independent claim 1. Wong does not teach or suggest a dedicated

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management card coupled to a plurality of host processor cards via a LAN switch on the management card, nor does Wong teach or suggest communicating with an external management network via a LAN switch on a management card, as recited in independent claim 8. Wong does not teach or suggest a server management card with a multiple-port LAN switch having at least four ports, the LAN switch coupled to a controller and configured to be coupled to a management connection of at least one of a plurality of removable cards, as recited in independent claim 14.

In view of the above, independent claims 1, 8, and 14, are not taught or suggested by Wong. In addition, dependent claims 2-4, 6, 7, 9, 10, 12, 13, 15, 16, and 18-20, which further limit patentably distinct claim 1, 8, or 14, are also believed to be allowable over the cited reference. Allowance of claims 1-4, 6-10, 12-16, 18-20 is respectfully requested.

Dependent claims 2-4, 6, 7, 9, 10, 12, 13, 15, 16, and 18-20 are also further distinguishable over the cited reference. For example, Wong discloses that the server includes an I²C bus (Figure 1), but does not teach or suggest that CPU blades 15 and 16 transmit status information to the server management blade 10 via at least one I²C bus (see, e.g., claims 4, 10, and 16). Wong discloses that the server includes an RS232 port (Figure 1), but Wong does not teach or suggest that the server management blade 10 includes a plurality of serial ports (see, e.g., claims 7, 13, and 19).

35 U.S.C. §103 Rejections

The Examiner rejected claims 5, 11, and 17 under 35 U.S.C. §103(a) as being unpatentable over Wong in view of Bassman et al., U.S. Patent No. 6,295,567 ("Bassman"). Dependent claims 5, 11, and 17, are dependent on independent claims 1, 8, and 14, respectively. As addressed above, Wong does not teach or suggest the above-quoted limitations of independent claims 1, 8, and 14. Bassman also does not teach or suggest these limitations of independent claims 1, 8, and 14.

Dependent claims 5, 11, and 17 are also further distinguishable over the cited references. With respect to these claims, the Examiner acknowledged that "Wong does not expressly teach temperature sensor and controlling fan speed." (Final Office Action at para. no. 5, page 4). Bassman discloses an embedded controller 605 that controls the speed of each fan. (Bassman at col. 8, lines 42-43). However, Bassman includes no teaching or suggestion

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that the embedded controller 605, or any portion thereof, could or should be incorporated into a management card as recited in the claims.

In view of the above, dependent claims 5, 11, and 17, which further limit patentably distinct claims 1, 8, and 14, respectively, and are further distinguishable over the cited references, are also believed to be allowable over the cited references. Allowance of claims 5, 11, and 17 is respectfully requested.

CONCLUSION

In view of the above, Applicant respectfully submits that pending claims 1-20 are in form for allowance and are not taught or suggested by the cited references. Therefore, reconsideration and withdrawal of the rejections and allowance of claims 1-20 is respectfully requested.

No fees are required under 37 C.F.R. 1.16(b)(c). However, if such fees are required, the Patent Office is hereby authorized to charge Deposit Account No. 08-2025.

The Examiner is invited to contact the Applicant's representative at the below-listed telephone numbers to facilitate prosecution of this application.

Any inquiry regarding this Response should be directed to either Jeff A. Holmen at Telephone No. (612) 573-0178, Facsimile No. (612) 573-2005 or David A. Plettner at Telephone No. (408) 447-3013, Facsimile No. (408) 447-0854. In addition, all correspondence should continue to be directed to the following address:

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Respectfully submitted,

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CERTIFICATE UNDER 37 C.F.R. 1.8:

The undersigned hereby certifies that this paper or papers, as described herein, are being transmitted via telefacsimile to Examiner Tim T. Vo, Group Art Unit 2112, at Fax No. (571) 273-8300 on this 21st day of November, 2005.

By: Jeff A. Holmen

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